

AMENDMENTS TO THE CLAIMS

Please amend the claims. The following listing of claims replaces all previous versions in the Application:

What is claimed is:

1 – 29. (Canceled)

30. (Currently Amended) ~~The method of Claim 28, further comprising:~~ A method, comprising:

selecting a first frequency from a plurality of reference frequencies;

configuring a first device to align with the first frequency;

making a first attempt to phase lock the first device with an incoming data stream;

if the first attempt succeeds, then generating a data rate signal corresponding to the first frequency;

if the first attempt does not succeed, then

selecting a second frequency of the plurality of reference frequencies,

configuring the first device to align with the second frequency,

making a second attempt to phase lock the first device with an incoming data stream,

if the second attempt succeeds, then generating a data rate signal corresponding to the second frequency;

if a second device is initially aligned to a Local Area Network (LAN) reference frequency and the reference frequency corresponding to the data rate signal is a WAN reference frequency,

then delaying for a time interval,

then aligning the second device with the reference frequency corresponding to the data rate signal; and

if the second device is initially aligned to a Wide Area Network (WAN) reference frequency, then aligning the second device with the reference frequency corresponding to the data rate signal.

31. (Previously Presented) The method of Claim **30**, wherein the time interval is long enough to prevent line rate contention.

32-33. (Canceled)

34. (Currently Amended) ~~The method of Claim 33, wherein configuring the second device to align with the first frequency comprises:~~ A method, comprising:

selecting a first frequency from a plurality of reference frequencies;

configuring a first device to align with the first frequency;

making a first attempt to phase lock the first device with an incoming data stream;

if the first attempt succeeds, then configuring a second device to align with the first frequency;

if the second device is initially aligned to a Local Area Network (LAN)

reference frequency and the first frequency is a WAN reference frequency,

then delaying for a time interval,

then aligning the second device with the first frequency; ~~and~~

if the serializer is initially aligned to a Wide Area Network (WAN) reference frequency, then aligning the second device with the first frequency; and

if the first attempt does not succeed, then

selecting a second frequency of the plurality of reference frequencies,

configuring the first device to align with the second frequency,

making a second attempt to phase lock the first device with an incoming data stream,

if the second attempt succeeds, then configuring the second device to align with the second frequency.

35. (Currently Amended) ~~The method of Claim 33, wherein configuring the second device to align with the second frequency comprises:~~ A method, comprising:

selecting a first frequency from a plurality of reference frequencies;

configuring a first device to align with the first frequency;

making a first attempt to phase lock the first device with an incoming data stream;

if the first attempt succeeds, then configuring a second device to align with the first frequency;

if the first attempt does not succeed, then

selecting a second frequency of the plurality of reference frequencies,

configuring the first device to align with the second frequency,

making a second attempt to phase lock the first device with an incoming data stream,

if the second attempt succeeds, then configuring the second device to align with the second frequency;

if the second device is initially aligned to a Local Area Network (LAN)

reference frequency and the second frequency is a WAN reference frequency,
then delaying for a time ~~interval~~; interval,

then aligning the second device with the second frequency; and

if the second device is initially aligned to a Wide Area Network (WAN)
reference frequency, then aligning the second device with the second
frequency.

36. (Previously Presented) The method of Claim 34, wherein the time interval is long enough to prevent line rate contention.

37-38. (Canceled)

39. (Currently Amended) ~~The apparatus of claim 38, further comprising:~~ An apparatus, comprising:

- a first frequency selector to select a first frequency of a plurality of reference frequencies;
- a phase lock unit coupled with the first frequency selector
 - to attempt to phase lock an incoming data stream with the first frequency,
 - if the phase lock attempt fails, to signal the first frequency selector to select
 - a second frequency of the plurality of reference clock frequencies;
- a data rate select output coupled with the phase lock unit to generate a data rate signal corresponding to the reference frequency that the phase lock unit has successfully phase locked to the incoming data stream;
- a data rate select input to receive the data rate signal;
- a second frequency selector coupled with the data rate select input to select the reference frequency corresponding to the data rate signal;
- an output clock control coupled with the second frequency selector to clock an outgoing data signal according to the reference frequency selected by the second frequency selector; and
- a timer coupled with the second frequency selector to cause the second frequency selector to observe a time delay before selecting the reference frequency corresponding to the data rate signal if the reference frequency used initially to clock the outgoing data stream is a Local Area Network (LAN) reference frequency and the reference frequency corresponding to the data rate signal is a WAN reference frequency.

40-41. (Canceled)

42. (Currently Amended) ~~The article of manufacture of Claim 41, wherein the machine-accessible medium further includes data that causes the machine to perform operations comprising:~~ An article of manufacture comprising:

a computer readable medium storing data that, when accessed by a computer, cause the computer to perform operations comprising:

selecting a first frequency from a plurality of reference frequencies,
making a first attempt to phase lock the first frequency with an incoming data stream,

if the first attempt succeeds, generating a data rate value corresponding to the first frequency,

if the first attempt does not succeed, then

selecting a second frequency of the plurality of reference frequencies,
making a second attempt to phase lock the second frequency with an incoming data stream,

if the second attempt succeeds, generating a data rate value corresponding to the second frequency,

if the reference frequency used initially to clock the outgoing data stream is a Local Area Network (LAN) reference frequency and the reference frequency corresponding to the data rate value is a WAN reference frequency,

then delaying for a time interval,

then clocking the outgoing data stream with the reference frequency corresponding to the data rate value; and

if the reference frequency used initially to clock the outgoing data stream is a Wide Area Network (WAN) reference frequency, then clocking the outgoing data stream with the reference frequency corresponding to the data rate value.

43. (Currently Amended) The article of manufacture of Claim 42, wherein the time interval is long enough to prevent line rate contention.

44-45. (Canceled).

46. (Currently Amended) ~~The system of Claim 44, wherein the serializer further comprises~~ A system, comprising:

a deserializer including,

a first frequency selector to select a first frequency of a plurality of reference frequencies,

a phase lock unit coupled with the first frequency selector to attempt to phase lock an incoming data stream with the first frequency, if the phase lock attempt fails, to signal the first frequency selector to select a second frequency of the plurality of reference clock frequencies,

a data rate select output coupled with the phase lock unit to generate a data rate signal corresponding to the reference frequency the phase lock unit has successfully phase locked to the incoming data stream;

a serializer including,

a data rate select input,

a second frequency selector coupled with the data rate select input to select one of the plurality of reference frequencies, wherein the reference frequency selected is determined by a signal received at the data rate select input,

an output clock control coupled with the second frequency selector to clock an outgoing data signal according to the reference frequency selected by the second frequency selector,

a timer coupled with the second frequency selector to cause the second frequency selector to observe a time delay before selecting the reference frequency corresponding to the data rate signal if the reference frequency used initially to clock the outgoing data stream is a Local Area Network (LAN) reference frequency and the reference frequency corresponding to the data rate signal is a WAN reference frequency; ~~frequency.~~

a transmission line to carry the incoming data stream, wherein the transmission line is optical fiber or metallic wire; and

an interconnect from the data rate select output to the data rate select input to
cause the signal received at the data rate select input to be the data rate signal.

47. (Currently Amended) The system of Claim ~~45~~ 46, wherein the time interval is long enough to prevent line rate contention.

48. (Canceled)

49. (Currently Amended) ~~The system of Claim 48, wherein the machine-accessible medium further includes data that causes the machine to perform operations comprising:~~

A system, comprising:

a computer readable medium storing data that, when accessed by a computer,

cause the computer to perform operations comprising:

selecting a first frequency from a plurality of reference frequencies,

making a first attempt to phase lock the first frequency with an incoming

data stream,

if the first attempt succeeds, then generating a data rate value corresponding to the first frequency,

if the first attempt does not succeed, then

selecting a second frequency of the plurality of reference frequencies;

making a second attempt to phase lock the second frequency with an

incoming data stream,

if the second attempt succeeds, then generating a data rate value

corresponding to the second frequency,

clocking an outgoing serial data signal in accordance with the frequency

corresponding to the data rate value,

if the reference frequency used initially to clock the outgoing data stream is a Local Area Network (LAN) reference frequency and the reference frequency corresponding to the data rate value is a WAN reference frequency,

then delaying for a time-interval; interval,

then clocking the outgoing data stream with the reference frequency

corresponding to the data rate-value; and value,

if the reference frequency used initially to clock the outgoing data stream is a Wide Area Network (WAN) reference frequency, then clocking the outgoing data stream with the reference frequency corresponding to the data rate-value; value; and

a transmission line to carry the incoming data stream, wherein the transmission

line is optical fiber or metallic wire.

50. (Canceled)